```
Hydrophobic
                                                                Hydrophilic
                 -2
      0.00
 2
     0.00
 3
    -0.15
    -0.29
 5
    -0.71
 6
    -1.38
 7
    -1.49
    -1.61
 9
    -1.47
10
    -1.30
11
    -0.88
12
    -1.23
13
    -1.10
14
    -0.75
15
    -0.75
16
    -0.17
17
      0.30
                                            S
18
      0.65
19
      0.87
20
      0.73
21
      0.83
22
      0.33
                                            S
23
    -0.13
                                         = A
24
    -0.02
                                           Р
25
    -0.15
26
    -0.02
                                            Q
27
    -0.25
                                       === S
28
      0.25
                                            A ===
29
      0.13
                                            S
30
    -0.22
                                        == I
31
      0.37
                                            K ====
32
      0.35
33
      0.57
34
      0.10
                                            R =
35
    -0.12
36
      0.68
                                            A ======
37
      0.68
38
      1.15
39
      1.73
40
      1.75
41
      2.08
42
43
      0.70
                                            S
      0.13
44
                                            Ν
45
      0.13
46
    -0.22
47
    -0.63
48
    -0.05
                                            D
49
      0.75
50
      1.32
```

```
51
       1.32
       1.55
 52
 53
       1.63
 54
       1.17
 55
       0.42
 56
       0.42
                                              Ι
 57
      -0.08
 58
       0.02
                                              V
 59
       0.32
                                              K
      -0.10
 60
                                           = G
      -0.10
 61
                                           = N
 62
      -0.57
                                     ===== G
 63
      -0.52
                                      ===== Y
 64
      -0.55
 65
      -0.05
                                              Q
                                              S
 66
      -0.08
 67
       0.17
                                              Ρ
                                               ==
       0.17
 68
                                              R
 69
       0.17
                                              \mathbf{F}
 70
       0.18
                                              Ρ
      -0.32
 71
                                         === N
 72
       0.60
                                              S
 73
       0.63
                                              У
 74
       0.30
                                              Р
 75
      -0.05
                                              R
 76
      -0.37
 77
      -0.43
 78
      -1.50
 79
      -1.03
 80
      -1.03
 81
      -0.82
 82
      -0.47
 83
      -0.37
                                        ==== L
       0.70
 84
                                              Η
 85
       0.23
                                              S
 86
       0.47
 87
       1.05
                                                ==========
 88
       0.70
 89
       0.70
 90
      -0.10
                                           = R
 91
      -0.38
                                              I
 92
      -0.73
 93
      -0.73
 94
      -0.40
 95
      -0.40
 96
      -0.52
                                      ==== D
 97
      -0.27
                                         === N
 98
      -0.15
                                           = Q
 99
      -0.15
                                             F
       0.32
100
                                              G ===
       0.20
101
                                              L
       1.12
102
                                              Ε
103
       1.15
104
       1.95
```

```
105
      1.15
                                           E =========
106
      0.48
                                           N ======
107
      1.07
                                           D =========
108
      0.18
109
      0.65
110
     -0.27
                                      ===R
111
     -0.22
                                       == Y
112
      0.45
                                           D =====
113
     -0.30
                                      === F
114
      0.58
115
      0.58
116
      0.70
117
      1.00
118
      1.00
119
      1.18
120
      0.73
                                           S
121
      0.17
                                           E ==
122
      0.17
.123
     -0.18
                                       == S
124
     -0.18
                                       == T
125
     -0.12
                                        = I
126
      0.33
                                           I ===
127
     -0.17
                                       ==R
128
     -0.03
                                           G
129
      0..27
                                           R ===
130
     -0.32
                                      === W
131
      0.18
                                          .C ==
132
      0.18
                                           G:==...:
133
      0.50
                                           H =====
134
      0.67
135
      0.67
136
      1.25
137
      0.45
138
      0.45
139
      0.75
140
      1.25
141
      1.18
142
      0.72
143
      1.05
144
      0.25
145
      0.70
                                             ======
                                           Ν
146
     -0.10
147
     -0.10
                                        = I
148
     -0.55
                                    ===== K
149
     -0.08
                                        = I
150
      0.27
                                           T ===
151
      0.27
                                           F ===
152
      1.07
153
      0.75
154
      0.75
                                           D
155
      0.00
                                           D
156
     -0.13
                                        = Y
157
     -0.13
                                        = F
158
                                   ===== V
     -0.63
```

```
-0.25
159
                                    ===A
160
    -0.25
                                    === K
161
     0.50
                                         P =====
162
     0.28
                                         G ===
163
     -0.60
164
     -0.98
165
     -0.93
     -0.82
166
167
     -1.62
168
     -0.82
169
     0.07
                                         L =
170
      0.03
                                         L
171
      0.02
                                         Ε
172
      0.32
                                         D ===
173
     0.53
174
     -0.05
                                       = Q
175
     -0.63
                                 ===== P
176
     -0.17
                                      == A
     0.30
177
178
      0.23
                                         A ==
      0.35
179
180 0.27
181
      0.85
182
      0.85
    - 0.10
183
184
    0.10
                                         Ε
185
      0.12
186
     0.33
                                         V
187
     -0.47
                                        Т
    -1.08
188
189
     -0.83
190
     -1.02
191
     -1.02
192
     -1.45
193
     -1.12
194
     -0.50
195
     -0.50
196
     -0.20
                                      == N
197
     -0.50
                                  ==== S
198
     -0.18
199
     0.28
                                         S ===
    0.23
0.17
200
                                         V ==
201
202
    -0.18
203
     -0.23
204
     -0.25
205
     -0.25
206
     -0.33
     -0.57
207
                                 ===== A
208
      0.23
                                         D = =
209
      1.03
210
      1.62
211
      0.82
212
      0.82
```

```
Ž13
      1.62
214
      0.70
215
      0.70
                                        A ======
216
      0.13
217
      0.18
218
      0.77
                                        D
219
      0.77
220
      0.88
221
      0.08
222
      0.65
                                        D
223
      0.52
224
     -0.40
                                  ==== I,
225
     -0.87
                             ======= K
226
     -0.57
                                ===== Y
227
     0.23
                                        F ==
     -0.22
228
                                     == N
229
     0.00
                                        P
      0.45
230
                                        E ====
231
      0.92
232
      1.42
                                         =============
233
      0.62
234
      1.07
235
      1.27
236
      1.02
237
      0.13
                                        Е
238
     -0.67
                               ====== N
239
     0.13
                                        M =
240
     -0.43
                                 ==== Y
     -0.47
241
                                 ===== L
242
      0.25
                                        D ===
243
      0.65
244
      1.45
245
      0.95
                                        R ========
246
      1.52
247
      1.57
248
      1.08
      0.98
249
                                        R =======
250
      0.98
251
      1.48
252
      1.48
253
      1.48
254
      1.97
255
      1.80
256
      1.80
257
      1.00
                                        K =======
258
      1.00
259
      1.45
260
      0.65
261
      0.93
262
      0.93
                                         ========
263
      1.73
264
      1.15
265
      1.15
266
      1.95
```

```
267
       1.93
268
      1.48
269
       0.82
270
      0.83
271
      0.33
272
      0.33
                                           C
273
      0.35
                                           \mathbf{T}
274
      0.32
275
      0.53
                                           R
276
      0.35
                                           Ν
277
      0.38
278
     -0.42
                                     ==== S
279
      0.05
                                           V
280
      0.53
                                           N =====
281
      0.98
282
      0.93
283
      1.40
284
      1.40
285
      0.82
      0.35
286
                                           K
287
     -0.40
                                     ==== L
288
     -0.35
289
     -1.27
290
     -1.38
291
     -1.30
292
     -0.83
293
     ~-0.75
294
     -0.80
     -0.68
295
296
     -0.52
297
     -0.48
298
     -0.48
299
     -0.48
                                    ===== V
300
     -0.18
                                       == 0
301
      0.12
                                           R =
302
      0.40
                                           C ====
      0.20
303
                                           G
304
     -0.30
                                      === G
305
     -0.30
306
     -0.87
     -0.93
307
308
     -1.22
309
     -1.02
310
     -1.58
311
     -0.92
312
     -0.30
                                      === N
313
     -0.40
314
     -0.22
                                       == R
315
     -0.42
                                     ==== S
316
      0.18
                                           С
317
     -0.27
                                      === T
318
     -0.32
                                      === C
319
       0.35
                                           N ====
320
       0.35
                                           S ====
```

```
0.27
321
                                           G ===
322
       0.73
323
       1.18
                                             ==========
324
       1.20
325
       0.62
326
       1.18
327
       1.18
                                              ===========
328
       0.38
329
      -0.08
                                         = E
330
      -0.52
                                    ===== V
331
       0.07
                                           L =
332
      -0.43
                                      ==== Q
333
      -0.18
334
       0.03
                                           Ε
335
      -0.30
336
       0.62
                                           G ======
337
       0.62
338
       1.12
339
       1.12
       1.70
340
341
       1.92
342
       1.92
343
       1:35
344
       0.63
345
       0.55
346
      -0.25
347
     -0.42
                                     ==== M
348
      -0.42
349
      -0.65
                                  ====== L
350
      -0.40
                                     ==== V
351
      -0.62
                                   ===== D
352
       0.18
                                           I ==
353
       0.35
                                           Q
                                             ====
354
       0.17
355
       0.97
356
       1.43
357
       1.57
358
       1.57
359
       1.48
360
       0.87
361
       0.20
                                           D
      -0.14
362
                                         = C
363
       0.19
                                           Ι
364
       0.30
365
       0.58
366
       0.99
                                              ========
367
       1.77
368
       0.00
       0.00
369
370
       0.00
           Hydrophobic
                                                              Hydrophilic
```